



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/663,515	09/15/2000	Dale Scott Crombez	200-0029	2771

28395 7590 06/13/2002

BROOKS & KUSHMAN P.C./FGTI
1000 TOWN CENTER
22ND FLOOR
SOUTHFIELD, MI 48098

EXAMINER

GONZALEZ, JULIO C

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 06/13/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/663,515

Applicant(s)

CROMBEZ ET AL.

Examiner

Julio C. Gonzalez

Art Unit

2834

MC

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 September 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-15 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specifications disclose a method in which a power unit is turn off or on.

However, the specifications are not clear enough as to how the power unit is turn off or on. Are sensors being provided with a microcontroller to assist the power unit determine when the power should be off/on? What parameters are been used to determine the thresholds? Any parameter? How and what determines the thresholds? The speed of the vehicle? The temperature of the engine? The charging state of the battery? The conditions of the road? How is the change requested from off to on? About the auxiliary system, which includes an air conditioning, how is the air conditioning an auxiliary system if the air conditioning is a load? How the purge vapor system in an auxiliary system? The brake booster vacuum system?

How such devices assist the main power unit? Are the auxiliary system supplying power or absorbing power? In what sense are those devices considered "auxiliary system"? The specifications are not clear enough as to how such auxiliary system in combination with the main power unit determined when the unit should be off or on?

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-15 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, what is considered an "auxiliary system"?

In claim 2, what window parameter the first and second threshold values defined?

What are these values? What are these values' units?

In claim 3, what is meant by "a unit ON auxiliary system" and "a unit OFF auxiliary system"? Are those computer program commands that switch a valve?

How does the system knows when the unit is off and therefore apply the "unit OFF auxiliary system"?

In claims 5-8, how are such devices auxiliary systems? What makes them auxiliary systems?

In claim 9, how are the steps requested that a unit should be turned on or off? Are all auxiliary units turned off or on at the same time? How are the auxiliary systems below or above a unit OFF or ON auxiliary system threshold value?

In order to advance prosecution in the merits, the Prior Art will be applied as best understood by the examiner.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-4 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brigham et al and Ibaraki et al.

Brigham et al discloses a system for a hybrid vehicle, a piston driven engine as a main power unit (column 1, lines 17), determining an ON/OFF status of the unit (column 10, lines 8, 9, 13) and certain parameters threshold has to be set in order for the system to function efficiently (column 9, line 20).

However, Brigham does not disclose that the unit be kept ON when a threshold is exceeded or using ON/OFF parameters for a main unit.

On the other hand, Ibaraki discloses for the purpose of decrease running failure of hybrid vehicles that a unit may be kept ON or OFF depending on a certain threshold (column 9, lines 59-67).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a hybrid vehicle as disclosed by Brigham et al and to modify the invention by setting OFF/ON threshold parameters for the purpose of decrease running failure of hybrid vehicles as disclosed by Ibaraki.

7. Claims 5 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brigham and Ibaraki as applied to claims 1 and 10 above, and further in view of Tanihata et al.

The combined hybrid vehicle discloses all of the elements above. However, the combined hybrid vehicle does not disclose using a brake booster vacuum sytem.

On the other hand, Tanihata et al discloses for the purpose of prohibiting the running state that an engine which drives power is not started that a brake booster vacuum system may be used in hybrid vehicles.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined hybrid vehicle as disclosed above and to modify the invention by using a brake booster vacuum for the purpose of prohibiting the running state that an engine which drives power as disclosed by Tanihata.

8. Claims 7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brigham et al and Ibaraki et al as applied to claims 1 and 10 above, and further in view of Iwashita et al.

The combined hybrid vehicle discloses all of the elements above. However, the combined hybrid vehicle does not disclose using a purge vapor system.

On the other hand, Iwashita discloses for the purpose of reducing environmental pollution that purge vapor system may be used in hybrid vehicles (see abstract).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined hybrid vehicle as disclosed above and to modify the invention by using a purge vapor system for the purpose of reducing environmental pollution as disclosed by Iwashita et al.

9. Claims 6, 8, 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brigham et al and Ibaraki et al and Iwashita et al as applied to claims 1, 7, 10 and 14 above, and further in view of Yoshida.

The combined hybrid vehicle discloses all of the elements above. However, the combined hybrid vehicle does not disclose using an air conditioning system and catalyst system.

On the other hand, Yoshida discloses for the purpose of providing a hybrid vehicle with satisfactory power performances, a catalyst (column 4, line 47), an A/C system 70, and heating system (see claim 15).

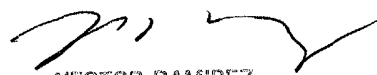
It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined hybrid vehicle as disclosed above and to modify the invention by using an A/C system discloses for the purpose of providing a hybrid vehicle with satisfactory power performances as disclosed by Yoshida.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio C. Gonzalez whose telephone number is (703) 305-1563. The examiner can normally be reached on M-F (8AM-5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.


NESTOR RAMIREZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

Jcg

June 7, 2002